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EXAMINER

NOTE, JANIS L

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/609,399

Applicant(s)

KATOH ET AL.

Examiner

Janis L. Dote

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 November 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 8-12 and 18-20 is/are pending in the application.  
4a) Of the above claim(s) 8-12 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-6 and 18-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 01 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/1/03; 9/23/04; 10/14/05; 12/20/05  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

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1. The examiner acknowledges the amendments to claims 1 and 4-6, the cancellation of claims 7 and 13-17, and the addition of claims 18-20 set forth in the amendment filed on Nov. 28, 2005. Claims 1-6, 8-12, and 18-20.

2. Claims 8-12 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicants timely traversed the restriction (election) requirement in the reply filed on Jul. 11, 2005.

3. The examiner has considered only the material submitted by applicants, i.e., copies of the originally filed claims, abstract, and figures, of the US applications, provided by applicants on Oct. 14, 2005, which are listed in the "List of related cases" in the Information Disclosure Statements (IDS) filed on Oct. 1, 2003. The examiner has crossed out the reference US 6,593,048 listed in the "List of related cases" in the IDS filed on Oct. 1, 2003, because the reference is listed on the form PTO-1449 filed on Oct. 1, 2003, and has been considered by the examiner.

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The examiner has considered the US applications listed on the "List of related cases" in the IDS's filed on Oct. 14, 2005, and Dec. 20, 2005.

5. The US application listed on the "List of related cases" in the information disclosure statements filed on Sep. 23, 2004, has been crossed out by the examiner. Applicants did not provide legible copies of those portions of the copending U.S. patent application, which caused it to be listed, as required in the office action mailed on Sep. 15, 2005. In that office action, applicants were given ONE MONTH to supply the mentioned omissions.

Applicants are advised that the date of any re-submission of any item of information contained in an information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Applicants' arguments filed on Oct. 14, 2005, have been fully considered but they are not persuasive.

Applicants state that "Mr. Godici, Commissioner for Patents, no longer required copies of cited pending applications

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to be submitted. This requirement was waived as of August 4, 2004 by Mr. Godici."

However, as stated in the IDS filed on Sep. 23, 2004, "[i]n accordance with discussions on August 4, 2004 with Mr. Nicholas P. Godici, Commissioner for Patents, it is no longer required to submit copies of cited pending applications. A modification of the Rules will be published soon in the Official Gazette." The official notice of the waiver of the copy requirement in 37 CFR 1.98 for cited pending U.S. patent applications was published in the Official Gazette on Oct. 19, 2004, after the IDS was filed on Sep. 23, 2004. See 1287 Off. Gaz. Pat. Office 163 (Oct. 19, 2004). The waiver was not retroactive. The "waiver" attributed to Mr. Godici has no effect, as there is no evidence that the alleged remarks were an official notice to the public at large and to the USPTO. There is no such thing as private agency law.

4. The objection to the specification set forth in the office action mailed on Sep. 15, 2005, paragraph 4, has been withdrawn in response to the amended paragraphs at page 21 of the specification, set forth in the amendment filed on Nov. 28, 2005.

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The objection to the specification set forth in the office action mailed on Sep. 15, 2005, paragraph 5, has been withdrawn in response to the applicants' comments in the response filed on Nov. 28, 2005, page 9, lines 18-22.

The rejections of claims 1-7 and 13-17 under 35 U.S.C. 112, second paragraph, set forth in the office action mailed on Sep. 15, 2005, paragraph 7, have been withdrawn in response to the amendments to claims 1, 5, and 6 and the cancellation of claims 13-17 set forth in the amendment filed on Nov. 28, 2005.

The rejections of claims 13-17 under 35 U.S.C. 102(b) over US 2001/0041083 A1 (Terazawa) and of claims 16-17 under 35 U.S.C. 103(a) over Terazawa combined with the other cited references, set forth in the office action mailed on Sep. 15, 2005, paragraphs 11, 16, and 17, respectively, have been mooted by the cancellation of claims 13-17 set forth in the amendment filed on Nov. 28, 2005.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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6. Claims 1-6 and 18-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

(1) Claims 1-6 and 18-20 recite that the toner composition satisfies the relationship " $(\text{PSi2p}(1 \text{ min}) - \text{PSi2p}(30 \text{ min})) \leq 0.8\text{eV}$ , wherein the  $\text{PSi2p}(1 \text{ min})$  represents a position of a Si2p peak of the Si element of the toner composition when the toner compositions is subjected to an X-ray photoelectron spectroscopy analysis after the toner composition is mixed with a carrier for 1 minute using a mixer at a revolution of 20 rpm, and  $\text{PSi2p}(30 \text{ min})$  represents a position of a Si2p peak of the Si element of the toner composition when the toner compositions is subjected to an X-ray photoelectron spectroscopy analysis after the toner composition is mixed with a carrier for 30 minutes using the mixer at a revolution of 20 rpm" (emphasis added).

The originally filed specification does not provide an adequate written description of mixing the toner with the carrier as recited in the instant claims. The originally filed specification at page 8, line 23, to page 9, line 3, and

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page 20, lines 1-11, discloses that the P<sub>Si2p</sub>(1 min) and the P<sub>Si2p</sub>(30 min) represent positions of a Si<sub>2p</sub> peak of the Si element of the toner composition when the toner composition is subjected to an X-ray photoelectron spectroscopy analysis after the toner composition is mixed with a carrier for 1 minute or 30 minutes using a "TURBULA mixer." The originally filed specification at page 12, lines 9-11, states that "'TURBULA mixer' means a commercially available TURBULA SHAKER MIXER T2F-10B-50A, manufactured by Willy A. Bachofen AG." TURBULA is a trademark. See the USPTO Trademark Electronic Search System (TESS) file for the trademark TURBULA, Serial No. 76610326, printed on Sep. 6, 2005. The originally filed specification does not disclose that the mixing of the toner composition with a carrier can be performed with "a mixer" as generically recited in the instant claims. The mixing with "a mixer" recited in the instant claims is broader than the mixing disclosed in the originally filed specification because it encompasses mixing with a mixer that is not a TURBULA SHAKER MIXER T2F-10B-50A, such as a HOMOMIXER.

(2) Instant claims 1-5 and 18-20 recite a "carrier being coated with a material having a thickness in a range of approximately 75% to 125% of an average thickness of the carrier" (emphasis added).



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The originally filed specification does not provide an adequate written description of the carrier recited in the instant claims. The originally filed specification at page at page 10, lines 4-6, states that "any portions of the coated material have a thickness in a range of from 75% to 125% of the average thickness." In other words, the portions of the coating have a thickness in the range of from 75% to 125% of the average thickness of the carrier coating. In example 2 at page 24, lines 22-25, the originally filed specification states that "it was found by TOF-SIMS that the thickness of the coating of the carrier is in the specific range of from 75% to 125% of the average thickness (specifically the thickness of the coating fell in a range of from 90 to 110%)." There is no disclosure in the originally filed specification of a carrier coating having a thickness in a range of "approximately 75% to 125% of an average thickness of the carrier" as recited in the instant claims. Nor is there any disclosure of the carrier coating being a percentage of the average thickness of the carrier itself as recited in the instant claims.

(3) Instant claims 18 and 19 recite that the regulating member "includes a doctor blade and a doctor roller" (emphasis added).

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The originally filed specification does not provide an adequate written description of a regulating member comprising both a doctor blade and a doctor roller as recited in instant claims 18 and 19. The originally filed specification at page 15, lines 19-21, discloses that the "doctor blade . . . configured to regulate the flow of the toner toward the developing sleeve . . . can be replaced with a doctor roller." In other words, the regulating member, which is configured to regulate the flow of the toner toward the developing sleeve, can be either a doctor blade or a doctor roller. The originally filed specification at page 9, lines 16-18, and at page 10, lines 15-16, discloses "a regulating member such as doctor blades and doctor rollers." In other words, the disclosure merely provides a list of regulating members. The originally filed specification does not disclose a regulating member comprising both a doctor blade and a doctor roller as recited in the instant claims.

Applicants assert that the specification at page 9 provides antecedent basis for the regulating member recited in the instant claims. However, as discussed above, the disclosure at page 9 merely provides a list of regulating members. It does not disclose that the regulating member comprises both a doctor

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blade and a doctor roller as recited in instant claims 18 and 19.

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1-5 and 18-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 5,380,614 (Totsuka), as evidenced by applicants' admissions at page 8, lines 3-10, and page 14, line 26, to page 15, line 3, of the instant specification (applicants' admission I).

Totsuka discloses a toner. The toner comprises toner particles, whose surfaces comprise surface-treated alumina particles that are fixed to the surfaces and hydrophobic silica particles that are adhered to the surfaces. The surface-treated alumina particles are surface-treated with dimethylsilicone and a fluoro-silicone-containing compound. Example 1 at cols. 8-9; and col. 11, lines 66-68. The Totsuka toner meets the toner compositional limitations recited in the instant claims.

Totsuka does not disclose that electrons are "shared" by the external additive and the toner particles as recited in instant claim 3. However, the instant specification at page 14,

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line 26, to page 15, line 3, discloses that "electron sharing" means "that a portion of the external additive having a volume of about 50% of the total volume of the external additive is embedded into and fixed to the surface portion of the toner particles." In example 1 of Totsuka, the surface-treated alumina particles are first mixed with the toner particles in a HENSCHTEL mixer, wherein the alumina particles are adhered to the surface of the toner particles. See Fig. 2(A); col. 6, lines 33-38, and example 1. That composite powder mixture is then placed in a "surface reformer," a Nara hybridization system, where compression force and frictional force are applied to the composite powder mixture such that the alumina particles are fixed to the surface of the toner particles as shown in Fig. 2(B). Col. 6, lines 39-48, and example 1. Fig. 2(B) shows that the surface-treated alumina particles are embedded in the surface of the toner particles. Fig 2(B) appears to show that about 50% by volume of the total volume of the alumina particles is embedded in the surface of the toner particle. Accordingly, because the Totsuka surface-treated alumina particles appear to be embedded in the surface of the toner particles in an amount of about 50% by volume of the total volume of the alumina particles, it is reasonable to presume that electrons are being "shared" between the toner particles and the surface-treated

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alumina particles as recited in instant claim 3. The burden is on applicants to prove otherwise. In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Totsuka also does not disclose that its toner satisfies the relationship recited in instant claims 1 and 2. However, as discussed above, the Totsuka toner meets the compositional limitation recited in the instant claims 1 and 2. The toner also appears to meet the "electron sharing" limitation recited in instant claim 3. The instant specification at page 8, lines 3-10, discloses that toners that satisfy the relationship recited in the instant claims have good charge properties and durability, and produce good images without causing problems in background fouling and toner scattering. According to Totsuka, its toner has superior charging properties, and provides a large number of images without the problems of increased fog density and toner scattering. Col. 1, line 64, to col. 2, line 2.

Totsuka discloses that the toner in example 1 exhibited stable charge properties after forming 5,000 copies. That toner also provided 5000 good quality images with stable image density and very little fogging, and with no generation of toner scattering. See Table 1 at col. 12, example 1. These properties appear to be the properties sought by applicants. Accordingly, because the Totsuka toner meets the compositional limitations recited in

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the instant claims and the toner appears to have the properties sought by applicants, it is reasonable to presume that the Totsuka toner satisfies the relationship recited in instant claims 1 and 2. The burden is on applicants to prove otherwise. Fitzgerald, supra.

Totsuka does not disclose that its toner is used in a developing device that includes a toner replenishing section, such that "the replenished toner composition has substantially a same charge quantity as that of the toner composition . . ." as recited instant claims 4, 5, and 18-20. However, the recitations in claims 4, 5, and 18-20 are merely statements of intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963). As discussed above, the toner disclosed by Totsuka meets the toner compositional limitations recited in the instant claims. Accordingly, the recitation of when the toner is used in a developing device that includes a toner replenishing section recited in instant claims 4, 5, and 18-20 does not distinguish

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the toner recited in the instant claims from the toner disclosed by Totsuka.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Totsuka, as evidenced by applicants' admission I, combined with US 5,340,677 (Baba).

Totsuka, as evidenced by applicants' admission I, discloses a toner as described in paragraph 8 above, which is incorporated herein by reference. For the reasons discussed in paragraph 8 above, the toner in example 1 of Totsuka meets the compositional limitations recited in instant claim 6. It is also reasonable to presume that the Totsuka toner satisfies the relationship recited in instant claim 6. The burden is on applicants to prove otherwise. Fitzgerald, supra.

Totsuka discloses a two-component developer comprising its toner and a carrier. Col. 11, lines 66-68. Totsuka does not disclose a carrier as recited in instant claim 6. However, Toksuka teaches that "any carrier generally used in electrophotography may be employed." Col. 7, lines 36-38.

Baba teaches a carrier comprising magnetic core particles coated with a resin coating comprising a particular vinyl copolymer and a particular fluoro-containing polymer. The magnetic core particles comprise a binder resin and magnetic

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particle dispersed in the binder resin. Confirmed by scanning electron microscopy (SEM), Baba discloses that the carrier core particles are "uniformly coated" with the resin coating.

Col. 7, lines 57-60, and example 1 at col. 34, in particular col. 34, lines 53-57. According to Baba, its "carrier . . . requires no replenishment of carrier during running and also gives a superior developing performance and developer lifetime because of the stability of chargeability of toner during running and under variations of humidity." Col. 4, lines 59-68. The carrier has superior impact resistance, electric resistivity, and stability in imparting charge to toner over a long period of time. Col. 7, lines 46-55.

Baba does not explicitly disclose that "any portions of the material located on the carrier have a thickness in a range of from 75% to 125% of an average thickness thereof" as recited in instant claim 6. However, as discussed above, Baba discloses that the carrier core particles in example 1 are "uniformly coated" with the resin coating confirmed by SEM. Baba rated the carrier surface of the carrier in example 1 as excellent, "AA." Baba did not report that the resin coating was uneven as reported for the carrier in comparative example 3. Table 2 at cols. 39-40. Accordingly, based on the information disclosed in Baba, it is reasonable to presume that the resin coating on



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the magnetic core particles in the Baba carrier in example 1 meets the thickness limitation recited in instant claim 6. The burden is on applicants to prove otherwise. Fitzgerald, supra.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings in Baba, to use the Baba carrier as the carrier in the developer disclosed by Totsuka. That person would have had a reasonable expectation of successfully obtaining a developer that has superior developing performance and developer lifetime as disclosed by Baba.

10. Claims 1-5 and 18-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese Patent 03-116054, as evidenced by Totsuka and applicants' admissions at page 8, lines 3-10, and page 14, line 26, to page 15, line 3, of the instant specification (applicants' admission I). See the USPTO English-language translation of JP'054 for cites.

JP'054 discloses a toner. The toner comprises toner particles, whose surfaces are treated with negatively chargeable hydrophobic silica particles and positively chargeable hydrophobic silica particles. Translation, application Example 2 at pages 10-11. The negatively chargeable hydrophobic silica particles are mixed with the toner particles and then

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subjected to a surface treatment with a hybridizer, which is manufactured by Nara Kikai Co., for over a five minute period. Accordingly to JP'054, the negatively chargeable silica particles are "firmly adhered" to the surface of the toner particles. Translation, page 5, lines 21-24. The JP'054 toner meets the toner compositional limitations recited in the instant claims.

JP'054 does not disclose that electrons are "shared" by the external additive and the toner particles as recited in instant claim 3. However, the instant specification at page 14, line 26, to page 15, line 3, discloses that "electron sharing" means "that a portion of the external additive having a volume of about 50% of the total volume of the external additive is embedded into and fixed to the surface portion of the toner particles." As discussed above, the negatively chargeable silica particles are first mixed with the toner particles and then the resultant mixture is subjected to a surface treatment with a hybridizer, which is manufactured by Nara Kikai Co., for a period of five minutes. Totsuka disclose that when toner particles comprising external particles present on the surface of the toner particles are placed in a "surface reformer," a Nara hybridization system, compression force and frictional force are applied to the toner particles such that the external

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particles are fixed to the surface of the toner particles as shown in Fig. 2(B). Col. 6, lines 39-48. Fig. 2(B) shows that the external particles are embedded in the surface of the toner particles. Fig 2(B) appears to show that about 50% by volume of the total volume of the external particles is embedded in the surface of the toner particle. Accordingly, because the JP'059 negatively chargeable silica particles on the surface of the toner particles are subjected to a surface treatment with a Nara hybridizer over a five minute period, it is reasonable to presume the negatively chargeable silica particles are embedded in the surface of the toner particles in an amount of about 50% by volume of the total volume of the silica particles and that electrons are being "shared" between the toner particles and the negatively chargeable silica particles as recited in instant claim 3. The burden is on applicants to prove otherwise.

Fitzgerald, supra.

JP'059 also does not disclose that its toner satisfies the relationship recited in instant claims 1 and 2. However, as discussed above, the JP'059 toner meets the compositional limitation recited in the instant claims 1 and 2. The toner also appears to meet the "electron sharing" limitation recited in instant claim 3. The instant specification at page 8, lines 3-10, discloses that toners that satisfy the relationship

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recited in the instant claims have good charge properties and durability, and produce good images without causing problems in background fouling and toner scattering. According to JP'059, its toner exhibits high transfer efficiency as well as favorable fluidity and preservability. The toner provides images without density losses or fog during a continuous copying operation and without toner scattering. Translation, page 12, lines 11-16. JP'059 discloses that the toner in example 2 provided 100,000 images without density loss and without fog, and with no generation of toner scattering. The transfer efficiency of the toner was 93%. Translation, page 11, lines 2-13. These properties appear to be the properties sought by applicants. Accordingly, because the JP'059 toner meets the compositional limitations recited in the instant claims and the toner appears to have the properties sought by applicants, it is reasonable to presume that the JP'059 toner satisfies the relationship recited in instant claims 1 and 2. The burden is on applicants to prove otherwise. Fitzgerald, supra.

JP'059 does not disclose that its toner is used in a developing device that includes a toner replenishing section, such that "the replenished toner composition has substantially a same charge quantity as that of the toner composition . . ." as recited instant claims 4, 5, and 18-20. However, for the

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reasons discussed in paragraph 12 above, which are incorporated herein by reference, the recitations in claims 4 and 5 are merely statements of intended use. As discussed above, the toner disclosed by JP'059 meets the toner compositional limitations recited in the instant claims. Accordingly, the recitation of when the toner is used in a developing device that includes a toner replenishing section recited in instant claims 4, 5, and 18-20 does not distinguish the toner recited in the instant claims from the toner disclosed by JP'059.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP'059, as evidenced by Totsuka and applicants' admission I, combined with Baba.

JP'059, as evidenced by Totsuka and applicants' admission I, discloses a toner as described in paragraph 10 above, which is incorporated herein by reference. For the reasons discussed in paragraph 10 above, the toner in example 2 of JP'059 meets the compositional limitations recited in instant claim 6. It is also reasonable to presume that the JP'059 toner satisfies the relationship recited in instant claim 6. The burden is on applicants to prove otherwise. Fitzgerald, supra.

JP'059 discloses a two-component developer comprising its toner and a carrier. Example 2. JP'059 does not disclose a carrier as recited in instant claim 6.

Baba teaches advantages of using a carrier comprising magnetic core particles uniformly coated with a resin coating comprising a particular vinyl copolymer and a particular fluoro-containing polymer. The discussion of Baba in paragraph 9 above is incorporated herein by reference.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings in Baba, to use the Baba carrier as the carrier in the developer disclosed by JP'059. That person would have had a reasonable expectation of successfully obtaining a developer that has superior developing performance and developer lifetime as disclosed by Baba.

12. Applicants' arguments filed on Nov. 28, 2005, regarding the rejections in paragraphs 8-11 above have been fully considered but they are not persuasive.

Applicants assert that the amendment to claim 1 overcomes the rejections over Totsuka or over JP'059, because neither Totsuka nor JP'059 discloses or suggests the carrier recited in instant claims 1-5 and 18-20.

Applicants' assertion is not persuasive. Instant claims 1-5 and 18-20 are drawn to a toner, not to a two-component developer. The claims do not require the presence of the particular carrier recited in instant claim 1, but merely recites that the toner property, the relationship " $(\text{PSi2p}(1 \text{ min}) - \text{PSi2p}(30 \text{ min})) \leq 0.8\text{eV}$ ," is determined by mixing the toner with that particular carrier. For the reasons discussed in the rejections in paragraphs 8 and 10 above, the Totsuka toner and the JP'059 toner meet the toner compositional limitations recited in the instant claims. For the reasons discussed in paragraphs 8 and 10, it is also reasonable to presume that both the Totsuka toner and the JP'059 toner satisfy the relationship recited in instant claims 1 and 2 and the electron sharing property recited in instant claim 3. There is no evidence on the present record to show otherwise. Accordingly, the rejections of claims 1-5 and 18-20 in paragraphs 8 and 10 above stand.

With respect to instant claim 6, applicants further assert that the Baba carrier does meet the carrier recited in instant claim 6 because "there is no disclosure in Baba of the claimed thickness range of from 75% to 125% of an average thickness thereof." Applicants further assert that the "office action has

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not cited to any teachings in Baba that support the assertion that the claimed thickness is inherent."

Applicants' assertions are not persuasive. For the reasons discussed in the paragraph 9 above, it is reasonable to presume that the resin coating on the magnetic core particles in the Baba carrier in example 1 meets the thickness limitation recited in instant claim 6. As discussed in paragraph 9 above, Baba carrier particles in example 1 are "uniformly coated" with the resin coating confirmed by SEM. Baba did not report that the resin coating was uneven as reported for the carrier in comparative example 3. In other words, the Baba carrier particles are uniformly coated with a resin coating that is without any unevenness in the coating. According to Webster's New World Dictionary, Third College Edition, the term "uniform" is usually defined as "always the same, not varying or changing in form, rate, degree, manner, etc; constant." See Webster's New World Dictionary, Third College Edition, page 1458. Given the plain meaning of the term "uniform," because the Baba carrier is uniformly coated without any unevenness, it would have been reasonable to conclude that the Baba resin coating had a layer thickness that is substantially the same as the average layer thickness of the carrier coating layer, i.e., about 100% of the average thickness of the coating layer. Thus, it is



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reasonable to presume that the Baba carrier coating meets the thickness limitation of from 75% to 125% of the average thickness recited in instant claim 6. Applicants have not met their burden to show that the Baba carrier coating does not have a thickness of from 75% to 125% of the average thickness of the carrier coating. Accordingly, the rejections of claim 6 in paragraphs 9 and 11 stand.

13. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (571) 272-1382. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mark Huff, can be

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reached on (571) 272-1385. The central fax phone number is (571) 273-8300.

Any inquiry regarding papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Ms. Claudia Sullivan, whose telephone number is (571) 272-1052.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JLD

Feb. 3, 2006

  
JANIS L. DOTE  
PRIMARY EXAMINER  
GROUP 1500  
1700